

# ACTIVITIES REGARDING 3D IN SWEDEN

---

LANTMÄTERIET



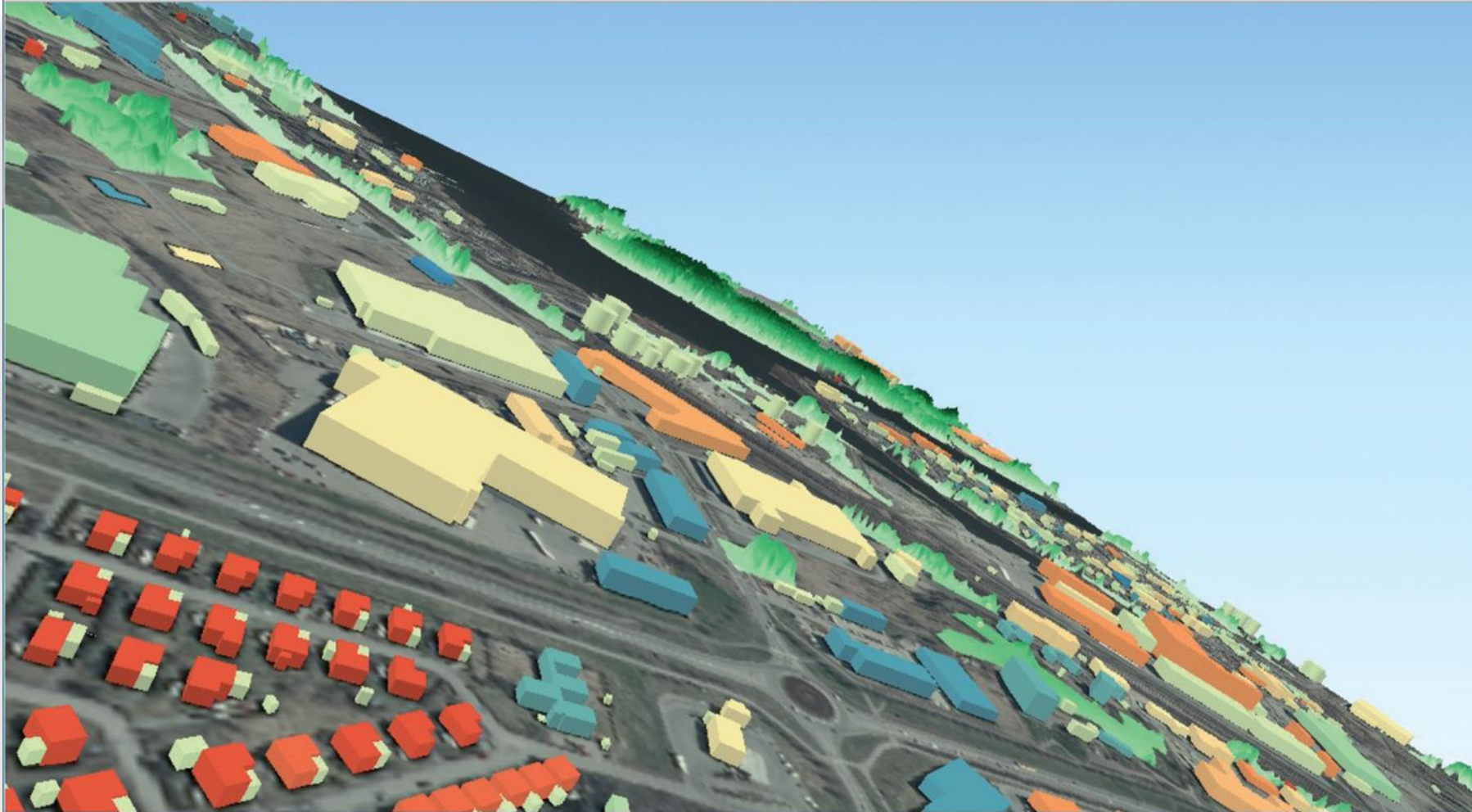
# NATIONAL GEODATA IN 3D



- Government assignment 2013-16 to investigate the conditions to deliver Lantmäteriets map- and imagedata in 3D
- Co-operation forum major producers in the public sector
  - 3D test platform
  - Framework - national spatial data in 3D
- The forum is currently dormant. The result is available at:

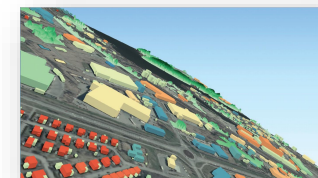
<https://www.lantmateriet.se/en/about-lantmateriet/Samverkan-med-andra/nationella-geodata-i-3d/>

# FRAMEWORK - NATIONAL SPATIAL DATA IN 3D





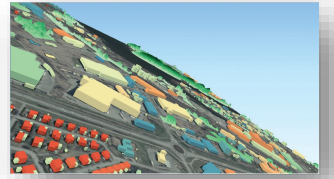
# FRAMEWORK - NATIONAL SPATIAL DATA IN 3D



- The vision in the National Geodata Strategy is the starting point for the Framework's vision as well as the strategy's goals
- The framework was commissioned by the government, on the basis of the Lantmäteriet's government assignment, to investigate the conditions for providing map and image information in three dimensions
- Cooperation between stakeholders



# FRAMEWORK - NATIONAL SPATIAL DATA IN 3D



Themes included, from a 3D perspective

- Pictures on the earth's surface
- Height and depth conditions
- Water areas, river basins and other hydrography
- Land cover
- Geological conditions - soil depth, soil type, bedrock and groundwater
- Location of buildings
- Transport infrastructure - road and railroad

# NATIONAL DRIVERS IN 3D AT THE MOMENT

## A smarter community-building process

<https://www.lantmateriet.se/en/about-lantmateriet/Samverkan-med-andra/lantmateriet---utvecklingsmyndighet-for-samhallsbyggnadsprocessen/>

- Lantmäteriets responsibility as a development authority in co-operation with National Board of Housing, Building and Planning, Municipalities etc

## Smart Built Environment

<https://www.smartbuilt.se/in-english/>

- national innovation and research program – 10 years
- publicly funded
- joint program between the BIM, geodata and industrial processes domains

## The Swedish Transport Administration BIM strategy

<https://www.trafikverket.se/for-dig-i-branschen/teknik/ny-teknik-i-transportsystemet/informationsmodellering-bim/>

# EXAMPLES OF NATIONAL PROJECTS INCLUDING 3D

- **A smarter community-building process**
  - Project for national specifications that also includes 3D for detailed planning, building permits ...
- **Smart Built Environment**
  - Smart planning for the built environment process (ended)
    - has created overview of data exchange specifications
  - Geodata och BIM data exchange specification (on-going and in co-operation with A smarter community-building process)

A stylized, monochromatic illustration of a cityscape with several buildings of varying heights and window patterns. Overlaid on the left side of the image is a white coordinate system consisting of a vertical line, a horizontal line, and a diagonal line forming a right-angled triangle. The text 'SMART BUILT ENVIRONMENT' is written in a bold, sans-serif font, with 'SMART BUILT' in dark gray and 'ENVIRONMENT' in white, positioned within the coordinate system.

# SMART BUILT ENVIRONMENT

Geodata och BIM data exchange specification





LUNDS UNIVERSITET



KARLSTADS KOMMUN



Boverket

HÖGANÄS  
KOMMUNLinköping  
Där idéer blir verklighetStockholms  
stad

TYRÉNS

Complete 3D  
Scandinavia ABGöteborgs  
StadBIM Alliance<sup>SWEDEN</sup>SYMETRI  
ADDNODE GROUP

SWECO



esri Sverige



IQ Samhällsbyggnad



BonaCordi

PlanB  
VIRTUAL CONSTRUCTION

NCC

FALUN



svensk byggtjänst



TRAFIKVERKET

VELLINGE  
KOMMUNHÖGSKOLAN  
I GÄVLE

Hammarö



FAMILJEBOSTÄDER

# PURPOSE

***Facilitate future data exchange through uniform digital deliveries of Geodata in 3D and BIM in the building permit process.***

# OBJECTIVE

- Develop and test detailed delivery specifications for the building permit process
- Contribute with input to future “manual of use” for relevant standards and specifications
- Provide suggestions for further development of relevant and tested specifications to “A smarter community-building process”